[SIGNAL FREQUENCY SPLITTER AND FREQUENCY SHIFT KEY DECODING APPARATUS USING THE SAME]

Abstract of Disclosure

A frequency shift key decoding apparatus, having a frequency divider, a signal frequency splitter, and a demodulator. The signal frequency splitter has a frequency synthesizer, (n-1) first mixers, n second mixers, and n filters, where n is an integer equal to or larger than 2. The present invention can be applied to a multi-function wireless receiver that supports multiple peripherals. Since a plurality of local carrier signals is generated by only (n-1) mixers, the frequency of the local carrier signals can be randomly changed. As the mixers occupy a very small area of the integrated circuit chip, the fabrication cost is low. Further, since the mixers are easily implemented using a digital circuit, the frequency shift key decoding apparatus, and even the whole wireless receiver can be implemented in a single chip.

Figures